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MISCELLANEOUS.

Hyaline Degeneration.

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A dengeneration is a metamophosis, or changing, of the protoplasm of a cell, whereby it becomes altered in physical and perhaps chemical characters. It is a retrograde change, an alteration from a more or less complex to a simpler form, and the tissue or organ thus affected suffers more or less disturbance in its physiological function. The healthy body depends upon a proper performance of physiological functions in every organ, and when this becomes perverted then we may have disease. A pathological process occurring in one organ may manifest itself during life, not in that organ, but in some distant organ. Or a lesion in one organ may be primary to a secondary condition elsewhere. Thus a lesion in the medulla may cause polyuria and polydipsia conditions where the original lesion is lost sight of, and a false one referred elsewhere. And, a pathological condition of the kidney may cause secondary alterations in function of lungs or brain.

As a disturbance in function in one organ may produce another in some distant one, so one degenerative change may produce another, either in the same or in a distant organ. The effect on the individual, which many of the pathological processes will have, when acting to disturb the function of certain organs, is more or less understood. But the forces acting to produce these changes is largely speculative. The scope of this paper will be, then, the histological description of one of these degenerative changes, occurring in specimens which I present to you, together with a short history of each, the citation of such authorities as I can find bearing on the subject. Finally a brief speculation in regard to them.

Specimen No. 1.—Hyaline degeneration of ovary: Post mortem, ovaries nonadherent, enlarged, firm and studed with white circular areas, varying in size to the diameter of a quill. Uterus normal and probably never impregnated. Kidneys normal in size, but slightly pale. Other organs apparently normal. The opportunity for a proper post mortem in this case was not presented, hence no examination was made of the central nervous system. History—Age, 26; married; never had child; sick six months; complained of excessive pains in head and abdomen; abdomen distended, giving appearance of pregnacy. Digital examination of generative organs occasioned excessive pain; menstruation at first irregular, later suspended; polyuria and polydipsia; urine clear like water; sp. gr. 1000; no sediment, albumin or sugar. Microscopical examination of ovaries show excessive hyaline degeneration. The degenerated areas being the white ones that show so plainly. No graffian follicles can be seen and the normal ovarian stroma is changed largely to hyaline material, with a small amount of fibrous tissue interspersed between and binding these areas together. Kidneys show albuminous degeneration of tubular epithelium.

Specimen No. 2.—Hyaline degeneration of uterus: Operation by Dr. Ward. Patient presented the following history: Age 39; married; mother of four children; menstruation excessive; kidneys and abdominal or-

gans healthy; great pain in head and back; tenderness over pelvic organs, uterus enlarged and soft; cervical laceration and erosion; endometrium inflamed; bloody discharge from uterus. Patient presented yellow cachectic appearance. The case was referred to Dr. Ward for operation on cervix and for extirpation of tubes and ovaries, with suspicion of malignant trouble involving the uterus.

Microscopical Appearances.—Uterus enlarged, soft and very friable. Cervix large, soft, lacerated and eroded. Endometrium inflamed and covered with soft granulations. The friable character was clearly illustrated by the fact that during the operation the uterus partially tore into two parts. Microscopically a section of this friable part shows quite extensive hyaline degeneration of tissues in and around the blood vessels. Mucous membrane crowded more or less with leucocytes and hemorrhagic extravasations, gland tubes not in normal number.

In addition to these specimens I have a number of others which exhibit more or less of this form of degenerative change, but which I do not care to present to you tonight, partly on account of a lack of clinical history, and because these two cases will serve sufficiently for a text. Hyaline degeneration is a process occurring in tissues whereby the cell becomes more or less swollen and the protoplasm converted into a material having a ground-glass appearance. The first change occurs in the smaller arteries, probably in the muscular cells. Later it extends to the fibrous tissue and a large area will thus be formed by the coalescence of adjoining degenerated cells. As the process of degeneration extends the organ becomes larger, softer and more friable. The blood vessels become some narrower and probably may be obliterated by the entire vessel becoming destroyed by the process. In these degenerative areas may be found connective tissue cells, but whether they naturally belong there or whether they are cells that have not yet undergone the change, I cannot say, but probably the latter. This process closely resembles fibroid change in some characters. But I cannot quite agree with Gibbs that it is developed from fibrous tissue. Delafield and Prudden say, "it occurs especially in the walls of the small blood vessels in various parts of the body, in voluntary muscle fibres, and is said to sometimes involve interslitial tissue." In Specimen No. 1 we find numerous vessels which show this change in their walls. In Specimen No. 2 we find this change involving not only the vessel walls, but even the nonstriated muscle cells seem to be taking on this change. Microscopically this change closely resembles amyloid degeneration, but it differs from this in staining reaction and in its devolopment. It differs from fibriod change in that acids do not affect it. It stains readily with acid fuchsin and eosin, but not with the purely nuclear stains.

The causes acting to produce this degeneration of tissue are not well understood. For we find it under such widely differing circumstances. "It has been described as occurring in the brain, lymph glands and ovaries, in the tubules of the kidney, in the walls of aneurisms, in muscle fibres, in the lesions of diphtheria, tubuculosis and syphilis, in the hyaloid membrane and vessels of the eye, and elsewhere." (Delafield and Prudden.) I can confirm this in some instances. But I do not agree with the argument advanced, here, many times, on the authority of a New York pathologist, that this hyaline degeneration, often seen in organs the seat of chronic inflammation, indicates syphilis. For you will find this in tumors and in tubuculosis conditions where syphilis clearly does not play an ætological part. Probably the causes acting to produce this change in tissues are: inflammation, the formation of chemical products, their absorption and finally their action locally on certain anatomical elements. Thus nutrition is altered, impaired or destroyed, and the tissue is altered in physical and chemical characters.

Where this degenerative change occurs in large areas, affecting the blood supply, a membrane may have a still further degeneration and the formation of a cyst by the liquifaction of these areas. This can

be demonstrated in ovarian cysts and in some of the malignant tumors.

Garrigues tells us in his work, in the description of his so-called Gyroma, a hyaline degeneration of the ovary, that, "Gyroma is characterized by pain in the ovarian region, exhaustion and marked nervous disturbances, which may go so far as hysteria and mental aberration."

In all my specimens where I have found a hyaline degeneration in the ovary, and in Specimen No. 2, which I presented to you, I have a history of pain more or less severe accompanied by great weakness and by nervous phenomena.

In the case from which Specimen No. 1 is taken we have a large amount of hyaline material formed, and by referring to the history you will see that severe pain and nervous troubles characterized it, also polyuria and polydipsia. The question which naturally presents itself in connection with this case is: What was the cause of this symptom of diabetic urine? Since we have no history of other lesions than those mentioned of ovary and kidney, and as the pathological change found in the kidney is one of recent date, would it not be a logical conclusion to say that this condition was primarily in the ovary, and secondarily in some nervous center?

In the case of Specimen No. 2 we have a history characterized by severe pain, nervous phenomena and exhaustion, but what the outcome of this case would be if left to nature is only to be surmised. The operation has been a success and the woman is well today.

In the other cases where I have found this degenerative change in the sexual organs, and where operations have been undertaken for their removal, the results have been uniformly good. What can be said about cases of fibriod changes in these organs?

Don't misunderstand me and think I advocate that it is possible to diagnose this degeneration during life and that this change occurring in other organs is productive of symptoms such as we find in connection with the changes in sexual organs. Pathology today is but in its infancy. In looking up this subject only three authors can be found who devote a single line or even mention this frequently occurring change. But, inasmuch as we recognize the interdependence of organs for their proper physiological functions, it certainly behooves us as physicians to study these as well as other changes to which tissues are subject and then we will be the better able to understand many of the complex problems presented to us for solution in our practice.

DR. J. M. FRANKENBURGER, recently of Catskill, N. M., has returned from New York, where he has been taking a post-graduate course, and will locate at 615 Kansas avenue. The doctor is a graduate of the Kansas Medical College, and one of the bright men of the West, and will be a credit to the city and the State.

NEW York surgeons no longer consider it good surgery to wash out an abdominal cavity. If pus is found peroxide of hydrogen (Marchand's) and drainage are thought sufficient and at least safer than an attempt to wash out the abdominal cavity, with the possibility of thereby producing a more general infection.

PROSOROWSKY on the antiseptic action of coffee says that an ordinary infusion is strong enough to kill the microbe of cholera and anthrax in three hours, of typhoid fever in one day and the spores of anthrax in nine days.

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Topeka, Kansas, Saturday, June 8, 1895.

Dead Beatism—Symptoms and Treatment.

There is a disease more or less common in every locality characterized by a constantly manifested tendency to get something for nothing. The symptoms develop rapidly on acquaintance and become chronic. There are no periods of remission, though the symptoms are not always recognized on first acquaintance.

The disease seems to affect all classes of people and when once acquired seems very difficult to cure. It is sometimes called "dead beatism." Physicians very frequently meet these cases. They seldom come for the relief of this particular malady, but it is nevertheless very important that he should recognize it and if possible entirely eradicate it before prescribing for any other malady. There is one symptom which is characteristic of the disease. It seems to be of mental origin, yet it cannot be classed as a hallucination nor an illusion. These cases when presented with a bill for services always imagine they have been greatly wronged by the physician, though they may previously have been his best friend. They have no further use for him and no words are sufficient to express their indignation. When a physician gets a case of this kind and recognizes the malady the most radical treatment is indicated and we believe there is one method of treatment that never fails, but it must be continued for a long time, in fact, never relaxed: that is, require these cases to pay in advance. As long as this treatment is administered the symptoms never become manifest.

This disease occasionally develops among physicians themselves. We say occasionally because we believe it is very rare. We have heard occasional cases reported by merchants, and in our experience in medical journalism have met occasional symptoms. We feel sure that it is a diseased condition, for we can never believe that an intelligent man, physically and mentally sound, after carefully weighing the question, whether he could afford to pay one dollar for seven hundred pages of medical news, and sending in his order, would abuse the publisher for very modestly requesting payment. We believe there can be no question about the existence of some pathological condition. It may be a brain lesion or it is possible in some cases that it is a laceration of the pocket. If the former it is usually chronic and incurable, if the latter we can usually hope that it is only temporary. There can be no denying the fact that the public suffers by the existence of this disease and we believe some quarantine regulations should be instituted.

While the disease has not by any means reached an epidemic stage among physicians we are aware that a great many medical journals meet a sufficient number of spora-

dic cases to cause some uneasiness. We propose to adopt immediately a plan of treatment which we would suggest other journals might use to good advantage.

We believe the same treatment which succeeds in the hands of the physicians must also yield good results when administered to the physician himself. We will therefore adopt the cash in advance treatment and will begin the treatment at once as a quarantine regulation.

In the future should you feel that one dollar would be well invested in purchasing a year's subscription to THE KANSAS MEDICAL JOURNAL we will be pleased to receive your money and send you the JOURNAL for exactly one year from that time, or fifty-two issues. If any issue of THE KANSAS MEDICAL JOURNAL is not worth two cents and you will so inform us we will refund you the amount you have paid for it.

The Iodides.

As a class of therapeutic remedies the iodides have assumed a vast importance and though their action cannot be definitely described, have given decided and definite results in certain classes of diseases. A question often arises as to the most efficient and least dangerous of the iodides. Iodide of potassium, in spite of the objections to its use, has held its own with the profession, and at the present time no substitute has been able to meet all the requirements.

Volkoff and Stodnitzki, of St. Petersburg, have made the following deductions from experiments upon young people from twenty to twenty-five years of age, who took two daily doses of 5 grains each of the iodide of potassium:

"1. The assimilation of the carbohydrates in the food is but slightly diminished.

"2. The nitrogenous change is augmented.

"3. The oxidations in the organs are diminished; the quantity of carbohydrates in substances not sufficiently oxidized as well as the quantity of neutral sulphers is increased.

"4. The destruction of organic albumin is increased, to judge by the augmented quantity of sulphur in the urine.

"5. The weight of the body is only slightly diminished.

"6. Diuresis is increased.

"7. The assimilation of fat is diminished to a very slight extent."

The iodides as a class produce relaxed arterioles, lowered arterial tension and diuresis. Haig has advanced the theory that arterial tension varies with the uric acid circulating in the blood, and that the iodides by decreasing the urates diminish the arterial tension.

The iodides of sodium and potassium are very diffusible and rapidly excreted. They are irritant to the mucous membranes, causing coryza, conjunctivitis and irritation of the kidneys. Upon long continuation they produce great waste, anæmia and mental depression. These effects of the iodides as a class may vary somewhat in the different combinations, though there is a constant similarity of action with the iodides of ammonium, sodium and potassium. The potassium salts are all in large doses, cardiac poisons, muscular paralyzers and poisons to protoplasm, especially of the nerve tissue. The action of the sodium salts is not so intense, and they are neither so depressant nor so poisonous to the cardiac muscles and nerves. The ammonium salts act particularly upon the spinal cord and motor nerves. The iodide especially having this action.

The calcium salts, in small doses, are less irritant and less toxic, though in large quantities are waste producers. The iodide of calcium is very unstable and when taken is rapidly decomposed into hydriodic acid and salts of lime. As hydriodic acid is a substitute both for iodine and the iodides having alterative effects of equal value with either of the salts and being less offensive and less irritating, it is probable that the claims for iodide of calcium may be based upon the action of this acid rather than upon the calcium. Dr. Davis in *Journal of Materia Medica* says of it:

"I employ the calcium salts almost exclu-

sively. My reasons for this are that the potash salts are poisonous if taken in considerable quantities. This has been shown to be the case, particularly in connection with the study of chronic nephritis. Moreover, Prof. Germain See, is authority for the statement in *La Medicine Moderne*, for March, of last year, that preparations of potash are slow and uncertain in their absorption and elimination. On the other hand, he finds that the iodide and bromide of calcium are easily absorbed, are particularly useful for exerting upon the body the effects of iodine and bromine, and do not cause those gastric disturbances that so often interfere with the administration of potassium salts. Calcium salts enter so largely into the composition of bone and other tissues that they can always be regarded as having a direct nutritive value, and their innocuousness is not alone confined to the absence of irritating effects upon the digestive organs, as they cannot be regarded as poisonous in any sense of the word. The dose of the calcium compounds is practically the same as that of the potash salts, and their extended trial is worthy of the attention of practitioners of medicine."

Labord and Malbec in experimenting with the iodide of strontium find that it is analogous in action to potassic iodide though less energetic. It first produces a rise of arterial tension and an increased heart rate. This effect is only temporary however. The iodide of strontium is innocuous and can be used under the same general conditions as the iodide of sodium and potassium without many of the disadvantages and dangers of these salts, but it has not been demonstrated to have any value in syphilis. The potassium salt seems to take prestige of all others in the treatment of syphilis. A combination of the iodides of potassium, ammonium and sodium has met with sufficient success to recommend it in preference to the very large doses of potassium salt. Much of the danger and especially the irritating effect upon the stomach and possibly the kidneys may be obviated by large dilution. In administering the iodide of patassium it should be largely diluted with water and the patient instructed to drink freely of water after each dose.

Mercury in Syphilis.

Dr. J. William White, in "Nervous System," says he has recently been more and more impressed with the importance of full treatment and for long periods. He says when an insufficient dose is conjoined with the interrupted system of treatment, the results are only less disastrous than those obtained by the expectant treatment.

In order to make certain that a proper amount of mercury is being absorbed he interrupts the internal administration at intervals and gives an equivalent dose by inunction. Giving the inunctions for two weeks, at intervals of about three months. He continues the mercury for a period of two years, and then follows with the routine use of iodides for a period of six months.

The iodides, he says, are most beneficient in those stages when the specific microbe is presumably absent from the tissues and circulation, or at that period when the disease has ceased to be contagious or transmissable. He does not believe the iodides are indicated or of much service in the early stages.

The mercurial treatment of siphilis is now almost definitely established, and meets but few disputants. The manner of administering, and the time of continuing, are still questions of argument.

Fournier's plan of treatment, which was to continue at interrupted intervals for a period of five years, has not proven a success.

The hypodermatic injection of a sublimate solution has met with some brilliant results, but the general concensus of opinion seems to be that it is objectionable to the patient, sometimes dangerous, and not by any means so certain in its results as internal medication or that by inunction.

Resections in Empyema.

Dr. J. McFadden, in a paper on Thoracic Troubles from a Surgical Standpoint, says, in regard to the surgical treatment of empyema:

Partial resection of the ribs is attended by better results in some cases of empyema than the complete removal of the segments of several ribs. Serious misgivings are now entertained by conservative surgeons in this country and Europe as to the results achieved by Estlander's operation for empyema, except when there exist extremely rebellious fistulous openings of the thorax. The author referred to the recommendation to open the posterior mediastinum which, it was claimed, opens the way for the relief of abscesses and other affections of the mediastinum. Particular attention was called to the importance of gradual and partial evacuation of the purulent contents of a disabled lung, as an enfeebled and contracted lung cannot expand suddenly to fill up the space occupied by an extensive collection of pus.

A thoracoplastic operation—lessening the space around the collapsed lung—was performed by a Russian surgeon some five years ago by resecting a segment two or three inches long from the seventh rib, opening the pleural cavity and washing out, then plugging the opening with gauze. Next, a vertical incision two inches long was made along the outer border of the pectoralis major muscle exposing the sixth, fifth and fourth ribs, without denuding them of their periosteum, and removing from each a little wedge, so that the ribs are made movable. A similar vertical incision was then made in the posterior axillary line, serving for the exposure and division of the same ribs in this situation. The portions of the ribs lying between the two points of section are thus enabled to sink in, and when healing has taken place they protect the thoracic cavity and support the vertebral column. The operation of thoracotomy for abscess and gangrene of the lung it was stated should be coupled with antiseptic applications and gauze tamponade.

The Hygiene of the Kidney.

Medical and Surgical Reporter

Dr. S. Henry C. Simes, of Philadelphia (*Dietic and Hygienic Gazette*), calls attention to the relation between the skin and the kidneys, and observes if the skin is not in a healthy condition the kidneys have an extra volume of work to perform. The importance of a healthy action of the kidneys is manifested by the fact that serious trouble may arise in other organs as heart, lungs, brain and nervous system, when the excretory work of the kidneys is imperfectly done. In watching the action of these organs many factors must be taken into consideration, such as the nature of the diet, the amount of liquids consumed, the nature of the exercise and activity of perspiration. Then, again, as the urine varies so much, a correct examination cannot be made unless the entire amount voided in twenty-four hours be collected, and a specimen taken from this. The quantity of urine varies greatly with the amount of liquids holding the solid constituents of the food in sulution. When it is remembered that 950 parts of every 1,000 of the urine are water, the importance of this element in the dietary becomes evident. On this point, the author is strongly of the opinion that the majority of men eat too well and do not drink enough water, As a result of this, there is deposited in the tissues many effete products that should be carried off by the kidneys. The work done by those organs is in this way interfered with, and in time organic diseases often come on. It is owing to the large amount of water that much of the benefit from a milk diet arise. In advocating the use of abundance of water with the solids, the author again calls attention to the danger of washing down the food with it, and taking time to masticate properly. While water is of prime importance, it cannot take the place of the saliva. The benefit derived from a sojourn at a mineral spring is almost entirely due to the flushing out the system gets. Waste products are dissolved and

washed away by the didneys. The opinion is expressed that pure water drank for a lengthy period would have as good an effect. This of course applies to cases where there is no organic lesion, and efforts are directed against the ill-effects of a sedentary life and over-eating. In advocating the use of water, its excessive use mush be guarded against. The habit of taking too much water may be indulged in. This is the other extreme, and may result in harm. The effect of water is to make the kidneys act, and by over-drinking these organs may be overworked. The abuse, therefore, of water may prove the reverse of "*in aqua sanitas.*" In the cold season, warm clothing is of much value, as tending to prevent congestion of the kidneys. Should such happen, it must be relieved by acting upon the skin and bowels. Judicious bathing is useful, as tending to maintain the healthy action of the skin, and thereby avoid congestion of the kidneys. If many people drank more water, and used less solid food, kidney diseases would not be so common as they are at present.

Antitoxin a Failure in Vienna.

London Medical Times.

Now that the glamor of novelty is passing away, it is being found, as we feared would be the case, that the serum of diphtheria is by no means the absolutely curative agent we were led to expect it to prove. At a recent meeting of the Medical Society of Vienna, Professor Drasche presented a most unfavorable report as to its effects in thirty cases he had had under his observation. He found that the injections of the antitoxin serum affected the kidneys, and this observation was corroborated by those of other doctors. In presence of that fact it could no longer be believed that the injection had no injurious effects. It could not be a matter of indifference that no patient who was recovering from a dangerous illness should be subjected through this remedy to a further serious malady. With regard to the statistics which were supposed to prove its success, Professor Drasche said that in diphtheria the bare figures were no evidence. He pointed out that, according to MM. Gottstein and Kossowitz, notwithstanding the use of the serum, the total mortality from diphtheria in Berlin and Vienna had not decreased. Clinical observation was the sole means by which a true judgment could be formed. In the thirty cases, the progress of which he had followed, he had not met a single instance in which he could feel convinced that the treatment had produced a direct effect. The disease developed in an exactly similar manner in those patients who were treated with the serum as in those who were not, On the other hand there were many symptoms which warned medical men against its use.

Abortive Treatment of Erysipelas.

W. H. DeWitt, M.D., Cincinnati, in The Cincinnati Lancet-Clinic.

I don't know that I am strictly warranted in using this term, for I doubt whether there is, or can be, such a thing as aborting erysipelas, and yet I do believe the treatment I have adopted for the past twelve months comes as near to it as possible. I have treated in all eight cases, the average duration being a little less than four days. Five of the eight cases were facial, the remaining three of the lower extremities. following formula was used in each individual case:

℞ Ichthyol .....ʒiiss
Collodion.....ʒiss—M

This was directed to be applied every three hours, always commencing the application about one inch beyond the line of demarcation between the healthy and inflamed skin. I believe this to be of the greatest importance, By adopting this method you will in nearly every case prevent the spread of the disease. The strength of the solution can be varied if thought best, but after several trials I have found the one suggested the more reliable. A great deal will also depend on the quality of the collodion. If

good it will not crack and peel off in a few hours, but, on the contrary, will adhere firmly for some time, affording a perfect protection to the surface. In case it becomes loose and partially detached from the surface it should at once be removed and followed by a fresh application. At no time should the surface be left exposed longer than possible.

Chloral in Labor.

Gaillard's Medical Journal.

The use of chloral in the early stages of labor is undoubtedly gaining favor in this country. We understand that it is largely used in England. Dr. Gardiner has recently written strongly in its favor in the *Lancet;* he believes that it has a marked power in assisting dilatation of a rigid cervix, and had never seen post-partum hemorrhage following its use. Playfair has long been an advocate of the drug for this purpose; in the last edition of his work on obstetrics he is even more positive in his statements than in his former editions. Those who have had much experience will, we think, agree in this opinion. Playfair expresses the belief that chloral is destinied to be more extensively used in this capacity; in the eighth edition of his work he says that, so far as his experience has gone, he has not met with any symptoms which have led him to think that it has produced bad results.

The point of especial value in favor of chloral is that it may be administered when chloroform cannot be. To many mothers the most distressing part of the labor is the early stage, when the pains are nagging and ineffectual. Especially among nervous women of the upper classes, these pains are sometimes almost intolerably severe while the labor progresses but little. After the use of chloral we have frequently seen a despondent and anxious patient regain her courage and pass through her ordeal with comparative ease. Besides relieving the irregular and nagging pains of this stage, chloral, we believe, materially aids in dilatation of a thin and rigid cervix. Playfair believes that nothing else answers so well in case of rigid and undilatable cervix.

The amount of chloral administered must vary with the case and conditions. Fifteen grains may be given at first, and this dose repeated in half an hour, and again if necessary after one or two hours. If the stomach is irritable and will not retain the chloral, rectal injection may be resorted to. [In double the quantity given by the stomach. —ED.] It seems, in fact, to be even more effective when thus administered. Thirty grains are usually sufficient to produce a somnolent condition in which the pains become less freuqent but stronger, and nervous excitement is calmed. The patient frequently drops into a light sleep between the pains, but rouses as soon as they recur.

The use of chloral does not in any way interfere with the use of chloroform. The use of chloroform, however, is not required so early, and the amount exhibited, can, as a rule, be much diminished. We are convinced that too frequent use of chloroform retards the pains, and that the tendency to post-partum hemorrhage is somewhat increased thereby.

The time is long since passed when arguments were required to establish the propriety of administering anæsthetics during the course of labor. It is the duty of the physician not only to cure disease, but to relieve pain and suffering. The physician who neglects to relieve suffering when he can do so without detriment to his patient, is serously remiss in his duty.

Some Help We Get From Microbes.

L. Capitan, in Popular Science Monthly.

Ordinary digestion is performed in the stomach and the intestine by means of soluble ferments secreted by the organic cells, which attack alimentary substances, dissociate them, and render them assimilable; and this is perceived to be a function very similar to that of microbes. The digestive passages, however, contain immense quan-

tities of microbes continually brought in with the food, multiplying indefinitely, and performing exceedingly complex offices. Even if we take up only a few of these offices, we are compelled of necessity to assume that they intervene in digestive operations, either as aids to the organic diastases or as themselves effective agents. M. Duclaux, insisting on this point, has remarked that some celluloses are capable of being attacked only by microbes, no organic juice having sufficient strength to affect them. Mr. Pasteur does not believe in the possibility of digestion in a medium completely deprived of microbes.

Of the chemical activity of microbes, what we know is as nothing in comparison with what may be. Every species, every race, every variety of microbe is charged with a special function; the division of labor is carried among them to its extreme limits, so much so that in any chemical reaction each microbe takes its part in producing the process at different stages. Each variety has its duty in the work, determines a partial dissociation of the material which another species completes, and so on to the extreme simplification of organic matter, reduced to its elementary constituents, or to such conditions as to be assimilable by the plant.

Urethral Injections.

Guiard, in Annales des Maladies des Organes Génito-Urinaires.

The capacity of the urethra has been estimated at from seventy-five minims to two drachms, therefore it is generally held a urethral syringe should not be of greater capacity than one and one-half drachms; but recently it has been shown that posteurethritis, particularly late in the disease, is far more frequent than was formely supposed. By experimenting on the living subject, it will be found that the urethra will always hold two and a half, and often three to five drachms.

Deep injecitons are demanded only when definite symptoms amply demonstrate the posterior urethra is involved in the urethritis; as the patient can always tell when the spincter is forced, this can be readily avoided. To administer, employ a syringe of five drachms' capacity. When it is desired to overcome the sphincter vesicæ, gentle pressure is made, when the fluid will enter the bladder—I have encountered but one case in which the sphincter would not relax. It is better to give injections when the patient is upon his back. The requirement of an effective is that it shall reach the diseased parts, and to secure this a syringe of not less than five drachms' capacity is demanded, and the injection of the entire contents, if carefully done, is easy and causes no inconvenience.

Rational Therapeutics of Cholera Infantum.

Gustavus Belch, N.D., St. Louis. in New York Medical Journal.

No strict rules can be given for the treatment of disease. It is for this reason that so many physicians say we do not treat a disease, but we treat an individual. True enough, we treat the individual, but what we have most of all to consider is the disease. The individual will dictate to us alterations and modifications in our treatment.

A general plan of treatment may be outlined, however, and I will try to do so in regard to one of the most fatal diseases of babyhood—cholera infantum. There is certain philosophy in therapeutics which I would frame in the three following rules: First, remove if possible the disturbing causes; second, treat symptoms which *per se* are liable to endanger the life of the patient; and third, sustain vitality.

As said before, the therapeutics, which is based upon the ætiology and pathology of a given case is the only one to be employed.

Now, the ætiology of cholera infantum is not so obscure as asserted by a great many authors. Whether or not of miscropic origin, one thing is sure—it is due to a chemical decomposition of food, causing an in-

flammatory condition of the digestive and alimentary canal.

Clinical experience, furthermore, shows that this disease is of a grave character, producing death in a large proportion. Heat *per se* is not the immediate cause of this disease, but it influences its couse considerably. Therefore, gastric or intestinal disturbances in summer demand a closer attention than those which occur during the colder season. Cholera infantum is a disease met even in the palaces of the rich, although not so often as in the tenement houses of the poor, which fact proves again that bad air, filth and lack of ventilation are also of a predisposing influence, as well as an obstacle to a quick cure. The mortality in the tenement houses is larger than that of the richer parts.

If we consider the aforesaid, we shall first of all, as regards the treatment of this disease, have to restrict diet.

As soon as called to a case of cholera infantum, prohibit for the first day any food whatever. Mothers have no right to nurse the little patient either. Strict instructions must be given in that direction, because the timid mothers are often inclined to quiet the crying babies by putting them to the breast.

Remedies are of very little value. Beginning with calomel, salol, and all the newer antiseptics, finishing with subnitrate of bismuth—they have all proved a failure, for none of them work quickly enough.

The treatment as outlined by Dr. Elmer Lee, of Chicago, in his cases of typhoid fever, proved a success in my hands during last summer, and under this treatment I have lost only one patient out of twenty-three, while the monuments of my skill exercised during the year 1893 are decorating the cemeteries of the State of Connecticut.

So far as I knew, the best antiseptic (which has also a strong tendency to reduce local inflammation) was peroxide of hydrogen (medicinal) until hydrozone was used by me. Hydrozone being twice as strong as Marchand's peroxide of hydrogen (for economical reasons), the latter drug is preferred by me. This remedy can be administered internally as well as externally.

I add a tablespoonful of hydrozone to a pint of water for washing out the stomach. If necessary, this pracedure can be repeated. If the vital power of the little patient is not too low it can produce no harm. But in every case, no matter how far advanced, I do not omit an irrigation of the bowels, for which purpose I use a soft rubber catheter attached to a common bulb syringe. The catheter is introduced as high in the colon as possible. It is unnecessary to say that the water must first be sterilized. I do not agree with Dr. Lee in using hot soap water. On the contrary, I use cold water, and add to each quart about two ounces of hydrozone. The improvement after the first or second irrigation is marked. If necessary, these irrigations can be repeated every two hours.

Among other remedies there are only two to be employed, morphine and strycnine. Both ought to be administered hypodermically. Tneir indication is too well known and they are about all we need. No antipyretics soould be given. If the fever is very high and if the irrigation of the bowels does not reduce it, the whole body should be washed with alcohol.

The diet for the next twenty-four hours should be very light indeed. Sweet, strong Russian tea is all I allow.

Each individual case will teach us when food can be allowed again.

Since the adoption of this method of treatment I have met with the most remarkable success, and no honest practitioner should refuse it a trial.

Present Treament of Urethritis in New York.

The College and Clinical Record.

Dr. Ramon Guiteras read a paper on this subject at a recent meeting of the New York Academy of Medicine. (*Joural of Cutaneous and Genito-urinary Diseases*, April, 1895.) He stated that the methods of treating urethritis in this city seem to be quite similar both in the public institutions and in private practice, and on the whole it ap-

pears to be both rational and conservative. The craze for examining the discharge for the gonococcus seems to have abated, and most men have arrived at the conclusion that in nearly every acute running case, and in by far the majority of the subacute cases and gleets, this germ is present. This puts the consideration of the disease on a similar basis to that of some years ago, and leads us to consider all such cases of evident acute and chronic urethral discharge as urethritis, and not by the names of gonorrhœa specific and non-specific urethritis, strains, etc.

After discussing the various methods of treatment in vogue at the present time, Dr. Guiteras stated that the method by which he has obtained the best results is as follows: The acute stage he treated by diluents and anterior astringent injections. The diluent he employs consists of a tablet made by Fraser & Co., containing five grains each of the bicarbonate and citrate of potash, with enough citric acid to produce effervescence. One of these is taken every three hours in a glass of water. The astringent injection is a modification of Ultzmann's, and is composed of five grains each of sulphate of zinc, alum, and carbolic acid, with one drachm of glycerine to the ounce of distilled water. This is used three times a day after urinating and washing the anterior urethra with hot water. In rare cases, where there is a great deal of inflammation about the glands and prepuce, with perhaps glandular lymphatic complications, he does not give the injections, but simply the diluent, hot sitz baths, a purge followed by Rochelle salts every morning, and plenty of water. The diet should also be regulated, and a suspensory bandage constantly worn. To catch the discharge a butterfly dressing should be worn. If the injection above referred to has no effect, he orders a stronger one composed of ten grains of sulphate of zinc and half an ounce of the colorless (Lloyd) fluid extract of hydrastis of four ounces of water. If this fails, he employs a still stronger injection—one of Ricord's favorites—composed of sulphate of zinc, ten grains, acetate of lead, fifteen grains; tincture of catechu and opium, each one drachm to four ounces of water. This course of injections, in connection with diluents, will usually cure an ordinary case of urethritis when no posterior urethrits occurs. If it does occur, the anterior injections are left off, but the dilutents continued, with ten drops of tincture of belladonna in addition to check tenesmus. If the process is very acute the patient should be put to bed, allowing him to get up only for two hot sitz baths daily. He is put on a diet of milk and Vichy water. If the tincture of belladonna fails to control the tenesmus, suppositories of the extract of belladonna and morphine, each one-quarter of a grain, are substituted. The bowels should be kept open. As soon as the symptoms abate somewhat he begins to give instillations of silver nitrate, one grain to the ounce, every other day at the beginning. The patient is given sandalwood oil, beginning with fifteen drops and increasing five drops each day; or, instead, the santal-Midy capsules, beginning with one capsule and increasing the dose to three capsules daily. If this does not work well, he substitutes cubebs, copaiba, or the Lafayette mixture. If the discharge is rebellious and continues in a subacute form, he employs daily irrigations of a 1-to-3,000 permanganate-of-potash sulution from a fountain syringe elevated two feet through a velvet-eyed catheter passed into a bulbous portion of the urethra; if there is a subacute posterior urethritis associated with it, the fluid is allowed to run back into the bladder either by increasing the elevation of the syringe to five feet and compressing the meatus or by slipping the end of the catheter beyond the cut-off muscle. Where this fails he substitues a weak solution of silver nitrate, beginning with 1 to 8,000 and increasing the strength to 1 to 1,000 if necessary. If a narrowing or stricture exists it should be dilated with the Oberlaender dilator or an ordinary Otis urethrotome. If the gleety discharge continues, an endoscopic examination should be made, and nitrate-of-silver applications made through it.

The conclusions drawn by the writer in

his paper were as follows:

1. That it is impossible to treat urethritis according to any given rule at the present day; a successful method has not as yet been discovered.

2. That specialists are much better able to treat it successfully than the general practitioner.

3. The injections stopping all discharge or reducing it to a moisture about the meatus, such as those of bichloride, permanganate of potash, and nitrate of silver, are the most successful means of treating a fresh attack, and that of these, nitrate of silver is the one upon which most reliance can be placed.

4. That in all cases the patient should be treated conservatively, and the treatment should be modified according to the symptoms.

Castor-oil as a Surgical Dressing.

VANARSDALE in experimenting with fatty substances found that carbolized oil is not antiseptic and is irritating. Caster-oil he found would dissolve 50 per cent. of balsam of peru, which being sterile prevents the oil from becoming rancid. It is thick and does not prevent the flow of secretions. He uses four and five per cent. solutions and as high as 10 per cent. Gauze saturated with it being used to cover the wound.

Urinalysis, including Blanks for Recording the Analysis and Microscophic Examinations of the Urine, by Joseph C. Guernsey, M.D., is a book of 500 pages. The first part is devoted to the apparatus and chemical reagents for the various analyses and directions for their proper use. There are 500 blank tabulated leaves, properly numbered and indexed for the record of each examination. It is published by the J. B. Lippincott Co.

WE have a few copies of the "Antiseptic Club," which we will send with a year's subscription to the JOURNAL for $2.50.

Suggestive Therapeutics in Psychopathia Sexuals; with Especial Reference to Contrary Sexual Instinct.

By Dr. A. von Schrenck-Notzing (Munich, Germany). Authorized translation from the German by Charles Gilbert Chaddock, M.D., Professor of Diseases of the Nervous System, Marion-Sims College of Medicine, St. Louis. One volume, Royal Octavo, 325 pages. Extra cloth, $2.50 net; Sheep, $3.50 net. Sold only by subscription to the medical profession exclusively. Philadelphia: The F. A. Davis Co., Publishers, 1914 and 1916 Cherry St.

SEXUAL perversions, abnormalities of sexual organs and the great variety of diseases, both mental and physical, arising from unnatural direction of the sexual functions form the basis for an almost complete science. A general knowledge of medicine is entirely inadequate to deal with these cases. While the general medical literature is replete with certain types of sexual perversions it is only of recent years that any exhaustive study or any attempt at a classification and treatment in detail has been made. This work by Schrenck-Notzing and Chaddock combines with an exhaustive treatise on this subject an accurate and detailed report of suggestive therapeutics and its relation to this class of diseases. It is clearly shown from the cases cited that much of the existing evil is the result of unfortunate youthful association and a too common ignorance of the sexual function. He mentions numerous cases of sexual hyperesthesia with onanism where the subject was totally ignorant of the natural sexual function and had never experienced sexual desire. Legal interferrence in some of these cases of sexual perversion and the very suggestive reports of the newspapers has given this subject a prominence which decency formerly forbade. This unfortunate prominence of a more unfortunate evil necessitates careful consideration, a systematic study and if possible a successful management of the difficulty. This book is timely, covers the ground thoroughly and is in every sense a decent expose of the vices of both men and women, and their most successful management.

Forced Feeding in Consumption.

Daily Lancet.

Ever since Judarin-Beaumetz recorded his observations on forced feeding of gavage, its importance has been generally recognized by the medical profession.

Unfortunately, to force food down a man's throat does not insure its digestion and consequent absorption.

If we would supply the waste of this dread disease we must go a step farther, and it is a recognition of this fact which has attracted so much attention to the subject of artificial digestion.

Once digest food, whether in the body or outside of it, and Nature will look after its proper disposition.

Artificially digested foods have not, up to the present time, been a success, for the simple reason that they are unpalatable, but in Pascola, which is now being so extensively advertised to the medical profession, this objection has been entirely overcome.

The wasting consumptive needs fat, and, as we all know, starch is the natural source of this component of the animal economy. If evidence in support of such a statement were needed, we have only to look at the corn-fed hog.

It was this that led the manufacturers of Paskola to adopt a pure form of artificially-digested starch as the basis of their preparation.

Not only is Paskola a fattening food, the assimilation of which is assured, but it contains a physiological proportion of hydrochloric acid, and a combination of digestive that insure the digestion of proteid or meaty foods taken in conjunction with it. Therefore Paskola, which is a diet of rare meat, eggs, and similar articles rich in nitrogen, constitutes the ideal food for the consumptives.. It is so very palatable that the weakest stomachs receive and tolerate it without inconvenience, and its administration is almost invariably followed by a marked increase in weight and appetite.

The Pre-Digested Food Co. have such unbounded confidence in the product that they liberally offer to send a free sample, express prepaid, to any physician who may request it. Their advertisement will be found on another page.

Report of the N. Y. Pasteur Institute (Gibier's) Diphtheria Antitoxic Serum.

Dr. Henry L. Elsner, 516 Prospect avenue, Syracuse, N. Y. (former Vice-President of the New York State Medical Society:)

I have used Antitoxine in five cases of diphtheria, all of which were bacteriologically examined, and in all there was no room for doubt as to the correct diagnosis. Four cases came under treatment the first two days of the disease; all recovered. One case was in a dying condition on the fifth day of the disease; we gave the patient every possible advantage, injecting the Antitoxine, but unfortunately the child (18 months old) died nine days after the injection.

I am preparing a paper on the subject of the Antitoxine treatment of diphtheria, to be read before our County Society next Tuesday, and will furnish you with a reprint if you desire it.

Dr. T. H. LALSTED, Salina Street, Syracuse, N. Y.: "I have been treated, or been associated with Dr. Elsner in the treatment of, three cases with Antitoxine during the past eight days. The first case was one in which the membrane had extended to the larynx, requiring intubation. The child is still living (eighth day). The other two children (physicians' children here) are doing nicely.

THE office of THE KANSAS MEDICAL JOURNAL has been removed from 723 to 631 Kansas avenue.